Table 1: Measurements of specimens mentioned in the text (in cm)

Specimen/Site	SCL	CCL	SCW	CCW	PL(gt)	PL(n-n)	PW	Remarks
Manouria emys								
1. Lamzawl (Lengteng)	46.4	52.5	34.5	49.0	46.0	42.0	31.5	
2. Lamzawl (Lengteng)	39.7	46.5	30.0	41.5	39.5	36.0	25.0	
Melanochelys trijuga								
1. Ngopa	25.5	27.0	18.0	24.5	24.0	23.5	15.5	Weight 1.5 kg

SCL=straight carapace length; CCL=curved carapace length; SCW=straight carapace width; CCW=curved carapace width; PL=plastron length; (gt)=greatest; (n-n)=notch to notch; PW=plastron width.

intergrades. This significant variation in a relatively small area was noteworthy.

Indian Black Turtle

***Melanochelys trijuga* (Schweigger 1812)**

A live turtle was examined at Ngopa town, 1,100m above msl. It was reportedly obtained from the nearby Tuivai river (around 450 m above msl; 23° 53' N, 93° 10' E) and kept as a pet. The river also marks the boundary between Aizawl and Champhai districts in that stretch. The measurements are given in Table 1.

Earlier records from Mizoram were from Ngengpui Sanctuary and adjacent areas of south Mizoram (Pawar and Choudhury 2000). The present record was the first from the entire northern and eastern part of the State (Fig. 1).

I would also like to correct a printing error in Choudhury (2001). In Tables 1 and 2, (gt) and (n-n) were only meant for PL and not SCW or CCW as printed (see headers).

I would like to thank N.R. Pradhan, H. Tlangkhuma, Zomawia, Hakim and the Range Officer of Murlen for help during my field study.

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20. FIRST RECORD OF THE COPPERHEAD SNAKE *ELAPHE RADIATA* FROM MADHYA PRADESH

The Copperhead Snake *Elaphe radiata* (Schlegel) has hitherto been reported only in Eastern Himalayas, northeast Orissa and Bengal. It has never been reported from Central India. However, during field excursions in Kanha National Park (22° 17' N, 80° 30' E) situated in the Mandla and Balaghat districts of Madhya Pradesh, I spotted this snake twice.

The first time was on July 26, 2001 at *c.* 1130 hrs in the Supkhar locality of the National Park. The dead snake was photographed and measured. It was 2.13 m in length. The specimen which has been preserved in the museum of the Kanha National Park was identified by Mr. Eric D'Cunha as *Elaphe radiata* and confirmed by Mr. J.C. Daniel on November 9, 2001.

Another specimen was spotted during August in Parsatola locality with Mr. B.R. Nagpure, Range Officer, Kisli. These records not only extend the range of *Elaphe radiata* to eastern Madhya Pradesh, but also add a new reptile species to the fauna of Madhya Pradesh.

I thank Mr. Eric D'Cunha and Mr. J.C. Daniel for identifying the snake.

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21. NEW RECORD OF AN ENDEMIC SPECIES, *PUNTIUS OPHICEPHALUS* (CYPRINIFORMES: CYPRINIDAE) FROM TAMIL NADU PART OF WESTERN GHATS

Puntius ophicephalus, a rare barb having very restricted distribution, is known only from the Periyar drainage of Kerala. It is characterized by an elongated *Channa*-like body. Raj (1941) described this species

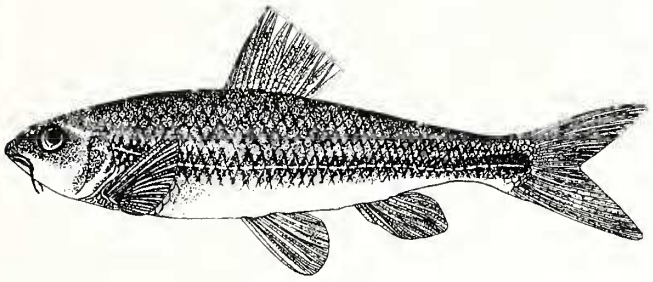

Fig. 1: *Puntius ophicephalus*

from Kallar stream, a tributary of Pambiyar river (adjoining Periyar lake), Kerala. Later, Silas (1951) recorded it from a tributary of Manimala river (Periyar river basin) at the base of Peermedu hills. For a long time, there was no further record of the species from these areas. Recently, Zacharias *et al.* (1996) rediscovered this species from Malapara at Periyar Tiger Reserve. So far, the distribution of the species had been restricted to the Periyar river basin, Kerala and it has been considered endemic to this basin. During a recent survey on fish habitats in the Western Ghats streams, a fairly good number of *Puntius ophicephalus* was collected from an east flowing stream, Surlitheertham, a tributary of Vaigai river, Tamil Nadu.

Description: D III/7; P I/12-13; V 1/8; A II/5; C 19; L. tr. scales 7½ 3½. Body elongate, dorsal and ventral equally arched; its depth 3.83 to 4.52 times in standard length. Head short and dorsally compressed, head length 3.93 to 4.32 times in standard length. Mouth sub-inferior, lips moderately developed and lower labial fold interrupted. Barbels two pairs, maxillary pair longer than rostral pair, its length 1.07 to 1.39 times in eye diameter. Dorsal fin inserted nearer to tip of snout than the caudal fin base. Ventral fin originates just behind the origin of dorsal fin. Lateral line straight and complete, with 42-44 scales; predorsal scales 15. Further morphometric characters are given in Table 1.

Colour: In life; dorsal black, flanks rich golden colour. Opercle has a mark of dark olivaceous-green on cheek. Eyes green. A dark band runs along the lateral line, which is composed of concentrated fine black spots on the base of lateral line. Belly and abdomen silvery white. Pectoral fins dark green with orange tinge. Dorsal pelvic, anal and caudal fins orange. After preservation: dorsal blackish-brown up to lateral line, dark above and lighter lateral; ventral pale yellowish-white. All fins are dull white.

Habitat and Ecology: The Surlitheertham stream is a tributary of the east flowing Vaigai river. The sampling site is located 7 km from Kambam town in Theni district (8° 51' 39.0" N, 77° 18' 40.2" E). It is an important local picnic spot. Downstream it is highly disturbed by bathing and pilgrimage activities. Specimens were collected around 4 km above the falls at an altitude of 545 m above msl, with a riparian cover of 40%. Not a single specimen could be collected in the downstream area. *P. ophicephalus* prefers larger pools and riffle habitats in forested streams. Adults prefer pools with thick vegetational cover. It hides in the bedrocks and boulder undercut. Juveniles prefer riffle (swift flowing) habitats.

Distribution: Periyar drainage in Kerala. Kallar, a tributary of Pambiyar river south of Pachakani estate (Jayaram 1999); Mundakayam stream, a tributary of Manimala river at the base of Peermedu Hills (Menon 1999) and Malapara stream in Periyar Tiger Reserve (Zacharias *et al.* 1996). This species has been recorded for the first time from the east flowing Surlitheertham stream in Vaigai river (east flowing), in Tamil Nadu.

Table 1: Morphometric data of *Puntius ophicephalus*

Morphometric characters: Proportions	Range	Mean	Standard Deviation
Standard length / Body depth	3.83-4.52	4.19	0.14
Standard length / Head length	3.93-4.32	4.10	0.20
Head length / Eye diameter	3.55-4.42	4.14	0.25
Head length / Inter-orbit width	2.29-2.70	2.48	0.14
Head length / Snout length	3.04-3.55	3.18	0.15
Head length / Pectoral fin length	1.17-1.40	1.26	0.07
Head length / Pelvic fin length	1.12-1.55	1.35	0.12
Head length / Maxillary Barbels	3.10-3.82	3.48	0.28
Maxillary Barbels / Eye diameter	1.07-1.39	1.19	0.11
Standard length / Pectoral fin length	4.85-5.50	5.17	0.22
Standard length / Pelvic fin length	5.13-6.08	5.57	0.30
Standard length / Predorsal distance	2.06-2.17	2.12	0.14
Pelvic to vent / Distance to Anal fin	6.59-8.76	7.50	0.86
Length of caudal peduncle / Height of Caudal peduncle	1.35-1.70	1.56	0.11

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22. SEXUAL DIMORPHISM OF THE PIG FACE BREAM *LETHRINUS RUBRIOPERCULATUS* (SATO) FROM SOUTHWEST COAST OF INDIA

Heterosexual animals often exhibit sexual dimorphism in their morphology. However, since it is not uncommon or taxonomically important, only a few observations have been made on sexual dimorphism in freshwater fishes, such as *Puntius filamentosus* (Thobias 1974), *Tetraodon travancoricus* (Inasu 1993) and marine fishes, such as *Narcine timlei* (Waghray 1985), *Priacanthus hamrur* (Tessy and Inasu 1998a), and *Pomadasys maculatus* (Tessy and Inasu 1998b). *Lethrinus rubrioperculatus* (Sato), a carnivore, inhabits the coastal seas and is commercially exploited in the southwest coast. Day (1958) described the genus *Lethrinus* based on 8 species. Fischer and Bianchi (1984) described 18 species of *Lethrinus,* but sexual dimorphism was not described for any of them.

During a study on the biology of perches on the southwest coast, about 43 specimens of the Pig Face Bream *Lethrinus rubrioperculatus* were caught in an area 8° 26' N-76° 51' E to 7° 41' N-77° 11 E (Vizhinjam to Kanyakumari) within a depth range of 39-54 m. Samples were collected by a bottom trawl (mesh size 30 mm at the cod end) by the trawler *Matsya Varshini* during January - March, 2001.

Morphometric parameters such as Total Length, Standard Length, Head Length, Caudal Peduncle Length, Caudal Peduncle Width, Eye Diameter and Inter-orbital width were measured and compared in the two sexes. Sexual dimorphism was exhibited by *Lethrinus rubrioperculatus* (Sato) (Figs 1a, 1b). The females are larger than the males in all the observed morphometric parameters. Moreover, body weight is greater than the males of the same age group (Table 1).

Table 1: Mean morphometric parameters (in cm) of *Lethrinus rubrioperculatus* (Sato)

Morphometric parameters	Male	Female
Total Length	32.40	33.40
Standard Length	25.40	26.00
Total Weight (gm)	489.50	550.50
Head Length	8.25	8.85
Inter-orbital Width	2.50	3.00
Caudal Peduncle Length	3.45	3.95
Height of Caudal Peduncle	2.65	3.10

The upper jaw of males extends forward and is broader than in females (Figs 2a, 2b). The dermosphenoticum in males is conspicuously protruding, whereas it is flattened and not so protruding in females (Figs 2a, 2b). There are two rows of large scales dorsoventrally located above the pectoral fin base in males, while there is a single row of scales in females (Figs 2a, 2b).

The posterior part of the soft rays of the dorsal fin is more filamentous and protrudes above the upper margin in males, while it is not so filamentous and